

In the Claims

The following Listing of Claims replaces all prior versions in the application:

LISTING OF CLAIMS

1. (Currently amended) A system comprising:
a radio modem unit ~~including a first DC offset circuit which comprises one of a pull-up or a pull-down circuit;~~
an RF signal booster unit ~~including a second DC offset circuit which comprises the other of the pull-up or pull-down circuits, wherein the booster unit is connectable to the radio modem unit~~ through a single connection line by way of which radio communication between the radio modem unit and RF signal booster occurs with a connector adapted to transmit RF signals through a connection line capable of carrying a DC offset; and
auto-detect logic configured to detect ~~respond to an interaction between the first and second DC offset circuits to thereby enable a determination of whether the booster unit is connected to the radio modem~~ a DC offset on said single connection line, said DC offset being indicative of a connection of the radio modem unit to the RF signal booster unit.
2. (Canceled)
3. (Previously presented) The system of Claim 1, wherein the auto-detect logic is located within the radio modem unit.
4. (Currently amended) The system of Claim 1, wherein the auto-detect logic includes an inductor to allow the DC offset to be placed onto the ~~connector, but not allow single connection line and to prevent~~ radio frequency energy from passing to pass up into the auto-detect circuit logic.

5. (Original) The system of Claim 1, wherein the booster unit includes an element to reduce the DC power level to low if the radio modem unit is connected to the booster unit.

6. (Currently amended) The system of Claim 5, wherein the ~~elements~~ element in the booster unit includes an inductor.

7. (Currently amended) The system of Claim 1, wherein the voltage on the single connection line ~~at the connector of the radio modem unit~~ is high if no booster unit is connected but is low if a booster unit is connected.

8. (Currently amended) A radio modem unit comprising:
a radio including a first DC offset circuit which comprises one of a pull-up or a pull-down circuit;
an RF signal connector operably connected to the radio, the connector being connectable to a RF antenna or a booster unit and including a single connection line adapted to carry an RF signal and a DC offset; and
a detector unit adapted to detect the DC offset to determine whether the connector is connected to a booster unit based on an interaction between the first ~~and~~ DC offset circuit and a second DC offset circuit included in the booster unit and comprising the other of the pull-up or pull-down circuits.

9. (Canceled)

10. (Original) The radio modem unit of Claim 8, wherein the DC offset of the connector is high if no booster unit is connected but is low if a booster unit is connected.

11. (Currently amended) The radio modem unit of Claim 8, wherein an inductor is used as part of ~~an auto-detect circuit~~ the detector unit.

12. (Original) The radio modem unit of Claim 8, wherein the radio modem unit is connected to a booster unit, the booster unit including a circuit to pull the DC offset at the connector to low.

13. (Currently amended) A system comprising:
a radio modem unit including a first DC offset circuit which comprises one of a pull-up or a pull-down circuit; and
an RF signal booster unit including a second DC offset circuit which comprises the other of the pull-up or pull-down circuits, wherein the booster unit is connectable to the radio modem unit with a single coaxial connection line connector adapted to transmit RF signals and a DC offset indicative of the presence of the booster unit based on an interaction between the first and second DC offset circuits, and wherein baseband signals are transmitted to the RF signal booster unit by way of the single coaxial connection line connector by the radio modem and are used by the booster unit to prepare for transmission.

14. (Canceled)

15. (Original) The system of Claim 13, wherein the baseband signals are power control signals.

16. (Currently amended) The system of Claim ~~13~~14, wherein the power control signals are used to control the power and channel selection.

17. (Currently amended) The system of Claim 13, wherein the RF signal booster unit includes a switch ~~in the transmit line~~ that prevents RF energy from being provided to a power amplifier in the booster unit until a valid power controller message is received from the radio modem.

18. (Canceled)

19. (Currently amended) An RF signal booster unit adapted to amplify RF signals from a radio modem including a first DC offset circuit which comprises one of a pull-up or a pull-down circuit, the booster unit including a second DC offset circuit which comprises the other of the pull-up or pull-down circuits, and further including a switch that significantly attenuates the RF energy from the radio modem that is provided to a power amplifier in the booster unit by way of a single connection line adapted to further carry a DC offset indicative, based on an interaction between the first and second DC offset circuits, of the presence of the booster unit until a valid power control message is received from the radio modem, the switch comprising a pair of diodes arranged back-to-back and disposed in the RF signal path, such that when the switch is in an ON position RF signals pass through the diodes from the radio modem to the booster unit, and when the switch is in an OFF position, RF signals are precluded by the diodes from effectively passing from the radio modem to the booster unit.

20. (Canceled)

21. (Previously presented) The system of Claim 19, wherein when the switch is in the ON position, current flows through the diodes and the RF impedance of the switch is reduced, but when the switch is in the OFF position, current is not flowing through the diodes, and the RF impedance of the switch is high.

22. (Currently amended) Method of using a radio modem unit and an RF signal booster unit, the booster unit and radio modem unit connectable using a connector establishing a connection line; the method comprising:

in the radio modem unit, detecting a DC offset on the connection line to determine whether the booster unit is connected based on an interaction between a first DC offset circuit in the radio modem including one of a pull-up or a pull-down circuit and a second DC offset circuit in the booster unit including the other of the pull-up or pull-down circuits;

if the booster unit is connected, transmitting baseband signals on the connection line from the radio modem to the booster unit to allow the booster unit to prepare for transmission; and

thereafter, transmitting an RF signal on the connector line from the radio modem to the booster unit.

23. (Canceled)

24. (Original) The method of Claim 22, wherein the baseband signal is the power control signal.

25. (Original) The method of Claim 24, wherein the power control signal includes a channel control and power level indications.